REMARKS/ARGUMENTS

At the outset, Applicant appreciates the thorough review and consideration of the subject application. The Non-Final Office Action of December 24, 2008 has been received and its contents carefully noted. By this Amendment, claims 1-17 have been amended and claim 18 has been cancelled without prejudice or disclaimer. Accordingly, claims 1-17 and 19 are currently pending in the application. Support for these amendments is provided in at least Figures 1-4 and related text of the specification. No new matter has been added.

In view of the above amendments and the following remarks, Applicant respectfully requests reconsideration and timely withdrawal of the pending objections and rejections for the reasons discussed below.

Allowable Subject Matter

Applicants appreciate the indication that claims 16-17 contain allowable subject matter. More specifically, claims 16-17 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Objection

In the Office Action, claims 1-2, 4-8, 14, and 15-18 were objected to as containing informalities. The claims have been amended to meet the requirement in the code of federal regulations. Applicant respectfully submits that the claims, as amended, overcome the stated objections. Accordingly, Applicant respectfully requests withdrawal of the objection for claims 1-2, 4-8, 14, and 15-18.

Rejections Under 35 U.S.C. § 101

Claims 1-14 and 19 stand rejected under 35 U.S.C. § 101 as allegedly failing to fall within one of the four statutory categories of inventions. Independent claims 1 and 3 have been amended to be directed to a process occurring as a result of executing instructions on a machine, e.g., a receiver. With regards to independent claim 19, applicant respectfully submit this is an apparatus claims, i.e., directed to a communication system. For at least these reasons, withdrawal of the rejection is respectfully requested.

Rejections Under 35 U.S.C. § 112

Claims 15-18 stand rejected under 35 U.S.C. § 112, second paragraph as being allegedly indefinite. Applicant respectfully traverses this rejection for at least the following reasons.

Claim 15 has been amended by deleting "said method" and further clarified to not be a hybrid claim. That is, amended claim 15 is an apparatus claim. Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C. § 112, second paragraph.

Rejections Under 35 U.S.C. § 103

Claims 1 and 15 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent Publication No. 2003/0099216 issued to Nilsson, *et al.* ("Nilsson") in view of U.S. Patent No. 7,346,121 issued to Dabak, *et al.* ("Dabak"). Applicant respectfully traverses this rejection for at least the following reasons.

Claim 1 recites a combination of features including, *inter alia*,

> providing channel estimation in a multipath environment to acquire a beamforming complex factor,
>
> wherein the providing step comprises modeling said propagation channels in the

> receiver as a linear superposition of a finite number of discrete multipath components (p=1,....,P) following an uncorrelated-scattering wide-sense stationary model, and
>
> wherein a multipath component is characterized by a time-varying multipath complex coefficient ($c_p(t)$ *and* ($ß_p c_p(t)$) and a delay (τ_p).

These features are not taught or suggested by the applied art of record.

Claim 15 recites a combination of features including, *inter alia*,

> a receiver providing channel estimation in a multipath environment to acquire a beamforming complex factor by modeling said propagation channels as a linear superposition of a finite number (p=1,. ., P) of discrete multipath components following an uncorrelated-scattering wide-sense stationary model, and wherein a multipath component is characterized by a time-varying multipath complex coefficient ($c_p(t)$ and, $ß_p c_p$, (t)) and a delay (τ_p).

These features are not taught or suggested by the applied art of record.

In constrast, Nilsson is directed towards a method and apparatus for estimating a phase offset between two channels of a communication system, so as to permit a complex channel estimate. The phase offset is a result of the rotation of the signaling channel prior to its transmission. Claims 1 and 15 are directed towards estimating a propagation channel in the presence of transmit beamforming. This is simply not disclosed by Nilsson. Moreover, as disclosed in page 5, ll. 26-30, when transmit beamforming is applied, the known pilots of CPICH logical channel provide estimates for the CPICH channel, but these estimates cannot be directly applied as channel estimates for the DPCH channel due to differences between the channels.

Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C. § 103(a) rejection.

Applicant believes that a full and complete response has been made to the pending Office Action and respectfully submits that all of the stated objections and grounds for rejection have been overcome or rendered moot. Accordingly, Applicant respectfully submits that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicant's undersigned representative at the number below to expedite prosecution. Prompt and favorable consideration of this Reply is respectfully requested.

No fee is believed due for this submittal. However, any fee deficiency associated with this submittal may be charged to Deposit Account No. 50-1123.

Respectfully submitted,

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